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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/287,776 04/07/99 KANG

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EXAMINER

WM02/0906

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ART UNIT

PAPER NUMBER

2673

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09/06/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/287,776

Applicant(s)

KANG ET AL.

Examiner

Jeff Piziali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 22 June 2001 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The corrected or substitute drawings were received on June 22, 2001. These drawings are acceptable.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Blahut et al. (5,570,126).

Regarding claim 1, Blahut discloses a video overlay apparatus [Fig. 4; 314] comprising: a video scaler [Fig. 4; 432] operatively responsive to input video data; and a programmable switching mechanism [Fig. 4; 440], operatively coupled to the video scaler, to selectively route video data to one of a plurality of video overlay generators [Fig. 4; 414, 416 and 430] to facilitate selective display of overlay data on a display device (Column 6, Lines 39-49).

Regarding claims 2, 10 and 16, Blahut discloses the programmable switching mechanism includes a programmable register (Column 6, Lines 39-49).

Regarding claim 3, Blahut discloses a first display engine [Fig. 4; 432] responsive to first graphics data [Fig. 5; 520] for generating first video window timing data; a second display engine [Fig. 4; 432] responsive to second graphics data [Fig. 5; 530] for generating second video window timing data; a first video overlay generator [Fig. 4; 430] operatively responsive to the first graphics data; and a second video overlay generator [Fig. 4; 414] operatively responsive to the second graphics data (Column 9, Lines 15-29).

Regarding claims 4 and 11, Blahut discloses a graphics data unpacker [Fig. 4; 420] operative to unpack graphics data received from a respective display engine; a keyer [Fig. 4; 440] operatively coupled to the graphics data unpacker and responsive to selectively route video data from the programmable switching mechanism; and a data packer [Fig. 4; 444] operatively coupled to the keyer to pack combined video and graphics data from the keyer (Column 6, Lines 21-49).

Regarding claims 5 and 19, Blahut discloses the programmable switching mechanism includes a selectable video clock source [Fig. 4; "Still-Frame" and "Full-Motion"] operatively coupled to the video scaler wherein the video scaler scales input video corresponding to a display engine for at least one of a plurality of video overlay generators in response to a video clock signal output from the selectable video clock source (Column 6, Lines 21-49).

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Regarding claims 6, 12 and 20, Blahut discloses the programmable switching mechanism further facilitates programming of frame buffer space for each display engine based on which video overlay generator has been selected to receive input video (Column 7, Lines 24-44).

Regarding claims 7, 13 and 21, Blahut discloses the selectable video clock source includes a programmable switch to facilitate switching between a plurality of display dependent clock signals [Fig. 4; "Still-Frame" and "Full-Motion"] that are selectively coupled to a common video scaler line buffer (Column 6, Lines 21-49).

Regarding claims 8, 14 and 22, Blahut discloses a user interface [Fig. 1; 132] operable to control the programmable switching mechanism to facilitate selective overlay display on a per application basis (Column 4, Lines 48-57).

Regarding claim 9, the limitations were previously addressed in the above rejection of claims 1, 3, 5 and 19.

Regarding claim 15, the limitations were previously addressed in the above rejection of claim 1.

Regarding claim 17, the limitations were previously addressed in the above rejection of claim 3, furthermore Blahut discloses generating a first video overlay [Fig. 5; "Background"] based on the first graphics data and at least a portion of selectively routed input video data; and

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generating a second video overlay [Fig. 5; 550] based on the second graphics data and at least a portion of selectively routed input video data (Column 7, Lines 24-44).

Regarding claim 18, the limitations were previously addressed in the above rejection of claims 4 and 11, furthermore Blahut discloses keying [Fig. 4; 440] video and graphics data from a respective display engine and the selectively routed video data selectively routed by a programmable switching mechanism; and packing [Fig. 4; 444] combined video and graphics data for each respective video graphic overlay generator for alternate output to the display (Column 6, Lines 21-49).

Response to Arguments

4. Applicants' arguments filed June 22, 2001 have been fully considered but they are not persuasive.

The applicants contend Blahut fails to disclose a programmable switching mechanism or plural video overlay generators. The examiner respectfully disagrees. Blahut's video combiner [Fig. 4; 440] serves effectively as a "programmable switching mechanism," in that the video combiner is operatively coupled to a video scaler [Fig. 4; 432], routing video data (from said video scaler) to one of a plurality of video overlay generators [Fig. 4; 414, 416 and 430 -- working in conjunction with the aforementioned video combiner], facilitating selective display of overlay data on a display device [Fig. 5]. As Blahut explains (see Column 8, Lines 19-29), the outputs of the video scalers, text generator and cursor generator are layered upon one another into a single video frame. While Blahut's video combiner may differ in operation from the

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applicants' own programmable switch (as shown in Fig. 1 and detailed in the current application), such switching operation is not documented in current claim language.

The applicants contend Blahut fails to disclose a programmable switching mechanism including a programmable register. The examiner respectfully disagrees. Admittedly, Blahut does neglect to use the precise term "programmable register." However, to create a video frame (as taught in Column 8, Lines 19-29) in the video combiner, a memory register would be inherently necessitated.

The applicants contend Blahut fails to disclose first and second video overlay generators, multiple display engines, or even timing data. Respectfully, the examiner disagrees. Blahut teaches of plural parallel video scalars (i.e. "display engines") [see Fig. 4; 432] which, responsive to full-motion video, would inherently require the generation of timing data. Again, the still-frame video scalars [Fig. 4; 430], text generator [Fig. 4; 414] and cursor generator [Fig. 4; 416] all serve here as "video overlay generators." And, also as previously mentioned above, the pixel layering technique (discussed in Column 8, Lines 19-29) would result in the video overlay generators being responsive to first and second sets of graphics data.

The applicants contend Blahut fails to disclose a selectable video clock source operatively coupled to the video scaler. The examiner respectfully disagrees. Blahut does not expressly mention a "selectable video clock." However, to render full-motion vs. still-frame video data, the scalars [Fig. 4; 430 & 432] would inherently require a selectable video clock source to properly time the video signal for display.

The applicants contend Blahut fails to disclose programming of frame buffer space for each display engine. The examiner respectfully disagrees. Blahut teaches three full-motion

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video images [Fig. 5; 520, 530 & 540] positioned on a single display screen. Each unique full-motion video image originates from a corresponding video scaler (i.e. "display engine") [see Fig. 4; 432], and is subsequently layered into the video combiner [see Fig. 4; 440].

The applicants contend Blahut fails to disclose a common video scaler. The examiner respectfully disagrees. Blahut discloses a video scaler [Fig. 4; 432] common to all timed full-motion video data.

The applicants contend Blahut fails to disclose controlling the programmable switching mechanism on a per application basis. Respectfully, one last time, the examiner disagrees. Blahut teaches allowing the user to transmit application control messages via remote control (see Column 4, Lines 48-57). Under such reasoning, claims 1-22 stand rejected.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (703) 305-8382. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (703) 305-4938. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 308-9051 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.



J.P.

September 4, 2001



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